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EXAMINER
LERNER, M

ART UNIT	PAPER NUMBER
2741	6

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Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

☐ Responsive to communication(s) filed on _____ .

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire ___*three*___ month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☒ Claim(s) *1-30* _____ is/are pending in the application.

    Of the above, claim(s) _____ is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☒ Claim(s) *1-30* _____ is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐approved ☐disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

    ☐ All ☐ Some* ☐ None   of the CERTIFIED copies of the priority documents have been

      ☐ received.

      ☐ received in Application No. (Series Code/Serial Number) _____ .

      ☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

    *Certified copies not received: _____ .

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). *4 and 5*

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

--- *SEE OFFICE ACTION ON THE FOLLOWING PAGES* ---

DETAILED ACTION

Information Disclosure Statement

1.   A copy of the White reference, U.S. Patent No. 5,386,494, has not been found among the references submitted by Applicants. Thus, this reference has not been considered.

Specification

2.   The disclosure is objected to because of the following informalities: On page 7, line 17, there should be a period at the end of the line.

   Appropriate correction is required.

Claim Objections

3.   Claims 5 and 6 are objected to because of the following informalities:

   "The first utterance" does not have antecedent basis in the preceding claims. Appropriate correction is required.

Claim Rejections - 35 USC § 102

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

   A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 1 to 30 are rejected under 35 U.S.C. 102(b) as being anticipated by Roberts et al.

Roberts et al. discloses a method of editing text after a document is created by a voice recognition system, as in claims 1 and 25. See column 4, lines 7 to 30. Figure 2 shows how recognition result tokens are initially formed from an utterance. The EDITMODE commands are correction commands that generate corrected text from incorrect text. See Figure 1. Correction commands are produced by the user by selecting a correct spelling from a displayed list in a variety of possible ways, including, voice commands, function keys and start spellings. See column 21, line 61 to column 22, line 9. A list of similar sounding words is displayed in a pop-up window 701 from a phonetic dictionary 500 of confusingly-similar entries. See Figure 15.

Specifically, with respect to claim 1:

(I) performing speech recognition on an utterance to produce a recognition result . . .

Figure 2 of Roberts et al. shows speech recognition being performed on a signal from microphone 811, and forming a token (step 118), i.e. recognition result, from a detected utterance (step 115).

(ii) identifying a correction command in the recognition result for the utterance . . .

Figure 1 of Roberts et al. shows that after an utterance is detected (step 111) and formed into a token, a variety of correction commands, e.g. DELETE CMD. (step 106), PICKCHOICE CMD. (step 107), LETTER CMD. (step 109), and EDITCHOICE CMD. (step 110) are identified for the utterance.

(iii) <u>producing corrected text from a portion of the recognition result for the utterance.</u>

Figure 18 of Roberts et al. shows an example of this where LETTER CMD. (step 109) is used to produce corrected text. See column 25, line 60ff.

Roberts et al. anticipates claims 2, 3, 7, 17 because that reference is clearly directed to correction of incorrectly spelled words.

Similarly, with respect to claim 25:

(I) <u>performing speech recognition on an utterance to produce recognition results</u> . . .

Figure 2 of Roberts et al. shows speech recognition being performed on a signal from microphone 811, and forming a token (step 118), i.e. recognition result, from a detected utterance (step 115).

(ii) <u>identifying a spelling command in the recognition results, wherein the spelling command indicates that a portion of the utterance comprises a spelling</u> . . .

Figure 2 of Roberts et al. shows that when EDITMODE is entered (steps 109 or 110), the user can enter a letter command either by speaking a letter or pressing a letter key to, for example, add a letter to the beginning or ending of a word. See column 20, lines 1 to 10.

(iii) <u>producing the spelling by searching a dictionary using the recognition results.</u>

Roberts et al. goes on to say that after the user has selected a letter command by entering an initial string of letters corresponding to the desired word, the active vocabulary is restricted (step 266) to those words beginning with those letters. Then, a list of likely words starting with

those letters is retrieved from a backup dictionary (step 268) and displayed along with the initial

string specified by the user (steps 270 and 272). See column 20, line 20 to column 21, line 35.

Roberts et al. clearly contemplates correcting a plurality of incorrect results from a

plurality of utterances, as in claims 4 to 6. In this context, an "utterance" may be a phoneme,

word, or sentence. Since Roberts et al. uses a context-dependent grammar and bigram models,

any correction of an utterance will affect the probability of both the preceding and succeeding

utterances. See column 13, lines 50ff. and column 19, lines 1 to 11. Thus, Roberts et al. takes

into account instances where the first utterance precedes the second utterance, and vice versa.

At column 24, lines 59 to column 25, line 9, Roberts et al. states that "rerecognition"

occurs whenever the user types a few letters of the corrected word and pauses, whereupon the

system automatically displays a list of corrected choices for the word inputted so far, as in claims

12 to 16.

Phonemic dictionary 500a of Roberts et al. is a "confused pronunciation dictionary" as in

claims 8 to 11, and dictionary 500 is a "confused spelling dictionary," as in claims 18 to 23 and

26 to 30. See column 18, line 43 to column 19, line 11. Word entries 504a in phonemic

dictionary 500a are spelled according to phonemic symbols 506. An acoustic model of words

represented by phonemic symbols lists associates words based upon confusingly similar sounds.

This prior art method utilizes both active and backup phonetic dictionaries or vocabularies, as in

claim 24. See column 20, lines 36 to 62.

Conclusion

6.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Robinson, Mitchell et al., Juang, Riley et al., McDonough et al., and Tominaga are cited to show related art.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin Lerner whose telephone number is (703) 308-9064.

ml

October 8, 1998

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